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# Indian Standard SPECIFICATION FOR HANDLOOM COTTON MALMAL

(First Revision)

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BUREAU OF INDIAN STANDARDS MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG NEW DELHI 110002

## Indian Standard

# SPECIFICATION FOR HANDLOOM COTTON MALMAL

# (First Revision)

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General of Supplies & Disposals Directorate (Inspection Wing), New Delhi

Directorate of Handlooms & Textiles, Governments of West Bengal, Calcutta

SHRI SAMIR MUKHERJEE ( Alternate ) Development Commissioner for Handlooms, New Delhi

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# Indian Standard

# SPECIFICATION FOR HANDLOOM COTTON MALMAL

# (First Revision)

#### 0. FOREWORD

- 0.1 This Indian Standard (First Revision) was adopted by the Indian Standards Institution on 10 August 1984, after the draft finalized by the Handloom and Khadi Sectional Committee had been approved by the Textile Division Council.
- 0.2 This standard which was first published in 1955, has been taken up for revision in order to make it up-to-date. Important changes carried out in the standard are:
  - a) deletion of breaking strength values since the standard recommends the use of yarns conforming to IS: 171-1973\*,
  - b) inclusion of seven new varieties and deletion of three out of four existing varieties,
  - c) inclusion of colour fastness requirement for dyed handloom cotton MALMAL, and
  - d) inclusion of inspection, marking and packing clauses.
- 0.3 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with IS: 2-1980†. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

#### 1. SCOPE

1.1 This standard prescribes the constructional particulars and other requirements of eight varieties of handloom cotton *MALMAL*. The cloth may be grey, bleached, striped or checked.

<sup>\*</sup>Specification for grey cotton yarn ( second revision ).

<sup>†</sup>Rules for rounding off numerical values ( revised ).

#### IS: 755 - 1984

1.2 This standard does not specify the general appearance, feel, finish, etc, of the cloth ( see 4.3 ).

#### 2. TERMINOLOGY

**2.1** MALMAL — An Indian term generally applied to fine cotton fabric slightly heavier than muslin.

#### 3. MANUFACTURE

- 3.1 Yarn The cotton yarn used in the manufacture of MALMAL cloth shall conform to the requirements of IS: 171-1973\*.
- 3.2 Cloth The cloth shall be free from substances liable to cause subsequent tendering.

#### 4. REQUIREMENTS

- **4.1** The constructional particulars of *MALMAL* shall conform to those given in Table 1.
- 4.2 The cloth shall also conform to the requirements given in Table 2.
- 4.3 If in order to illustrate or specify the indeterminable characteristics, such as general appearance, lustre, feel and shade of the cloth, a sample has been agreed upon and sealed, the supply shall be in conformity with the sample in such respects.
- 4.3.1 The custody of the sealed sample shall be a matter of prior agreement between the buyer and the seller.

#### 5. INSPECTION

- 5.1 The cloth when visually inspected should be reasonably free from the following defects:
  - a) West crack or more than two missing picks across the width of the material.
  - b) Prominently noticeable west bar due to the difference in raw material, count, twist, lustre, etc.
  - c) More than two adjacent ends running parallel, broken or missing and extending beyond 15 cm.
  - d) Prominent selvedge defects.
  - e) Noticeable warp or west float in the body.
  - f) Noticeable oil or other stains.
  - g) Noticeable hole, cut or tear up to 3 mm in size.

<sup>\*</sup>Specification for grey cotton yarn ( second revision ).

- h) Smash rupturing the texture or the fabric.
- j) Undressed snarls noticeable throughout the piece.
- k) Conspicuous gout due to foreign matter usually lint or waste woven into cloth.
- m) Conspicuous broken pattern.
- n) Dyeing defects (bars, streaks and patches).
- p) Any other flaw which would mar the appearance or affect the serviceability and/or durability of the cloth.

TABLE 1 CONSTRUCTIONAL PARTICULARS OF HANDLOOM COTTON MALMAL

( Clause 4.1 )

Variety No.	COUNT OF YARN FOR GUIDANCE ONLY		Ends/ cm	Picks/ cm	Mass	Len- gth	Width	WEAVE
	Warp	Weft						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9 <b>)</b>
	Cotton tex Count	Cotton tex Count			g/m²	m	cm	
1 2 3 4 5 6 7 8	100s ( 5·9 ) 100s ( 5·9 ) 80s ( 7·4 ) 80s ( 7·4 ) 60s ( 9·8 ) 60s ( 9·8 ) 60s ( 9·8 ) 60s ( 9·8 )	100s ( 5·9 ) 100s ( 5·9 ) 80s ( 7·4 ) 80s ( 7·4 ) 80s ( 7·4 ) 80s ( 7·4 ) 60s ( 9·8 ) 60s ( 9·8 )	32 40 27 32 27 29 28 32	32 40 27 31 27 33 24 28	39 48 42 49 50 56 54 62	20 or as de lared	c- 119,	Plain
Toler and Percent			± 5	± 5	± 5	see Note	± 2	
METHOD O	F			1963- 981*	IS:19 197		IS: 1954 <b>-</b> 1969‡	Visual

Note - The length shall not be less than the declared or marked value.

†Methods for determination of weight per square metre and weight for linear metre of fabrics (first revision).

Methods for determination of length and width of fabrics (first revision).

5.1.1 A reference may be made to IS: 4125-1967\* for details of these defects.

<sup>\*</sup>Method for determination of threads per unit length in woven fabrics (second revision).

<sup>\*</sup>Glossary of terms pertaining to defects in fabrics.

	TABLE 2 REQUIREMENTS OF H	ANDLOOM COT	TON MALMAL			
	( Clause 4.2 )					
SL No.	CHARACTERISTICS	REQUIREMENTS	METHODS OF TEST			
I.	Dimensional change, percent, Max					
	a) Loomstate	5.0	IS: 2977-1964*			
	b) Processed	4.0				
II.	Scouring loss, percent, Max					
	a) for loomstate cotton MALMAL	6.0	IS: 1383-1977†			
	b) for processed cotton MALMAL	2.5	( Mild Method )			
III.	Colour fastness ( for dyed MALMAL or	nly ) to:				
	a) Light	4 or better	IS: 686-1957‡			
			or IS: 2454-1967§			
	b) Washing: Test 4:					
	i) Change in colour	3 or better	IS: 765-1979			
	ii) Staining on cotton	3 or better				
	c) Perspiration:	*	IS: 971-1956¶			
	i) Change in colour	4 or better	·			
	ii) Staining on cotton	4 or better				

\*Method for determination of dimensional changes of woven fabrics (other than wool) on soaking in water.

4 or better

4 or better

IS: 762-1956\*\*

†Methods for determination of scouring loss in grey and finished cotton textile

materials (first revision).

d) Bleaching (Hypochlorite)

i) Change in colour

ii) Staining on cotton

Methods for determination of colour fastness of textile materials to daylight.

§Methods for determination of colour fastness of textile materials to artificial light (xenon-lamp).

||Method for determination of colour fastness of textile materials to washing: Test 4

(second revision).

Method for determination of colour fastness of textile materials to perspiration.

\*\*Method for determination of colour fastness of textile materials to hypochlorite bleaching.

#### 6. MARKING

- **6.1** The cloth shall be suitably marked or labelled with the following information:
  - a) Name of the material and variety number;
  - b) Manufacturer's name, initials or trade-mark, if any; and
  - c) Length (m) and width (cm) of the piece.

- 6.1.1 The product may also be marked with Standard Mark.
- 6.2 The use of the Standard Mark is governed by the provisions of Bureau of Indian Standards Act, 1986 and the Rules and Regulations made thereunder. The details of conditions under which the licence for the use of Standard Mark may be granted to manfucaturers or producers may be obtained from the Bureau of Indian Standards.

#### 7. PACKING

7.1 Unless otherwise agreed upon by the buyer and the seller, the cloth shall be packed in bales or cases in conformity with the procedure laid down in IS: 1347-1972\* or IS: 293-1980†.

#### 8. SAMPLING

- **8.1 Lot** The quantity of handloom cotton *MALMAL* of same variety, width and colour delivered to a buyer at a time shall constitute a lot.
- 8.2 To ascertain the conformity of the lot to the requirements of this standard, samples shall be drawn and inspected from each lot separately.
- 8.3 The number of pieces shall be selected at random for inspection shall be in accordance with Table 3.

TABLE 3 SAMPLE SIZE AND PERMISSIBLE NUMBER OF NON-CONFORMING PIECES				
Lot Size	Sample Size	Permissible No. of Non-conform- ing Pieces	Sub-sample Size	
(1)	(2)	(3)	(4)	
Up to 25	3	0	2	
26 ,, 50	5	0	2	
51 ,, 150	8	0	3	
151 ,, 300	13	1	3	
301 ,, 500	20	1	5	
501 ,, 1 000	32	2	5	
1 001 and above	50	3	8	

8.4 For selection of samples at random from the lot, procedure given in IS: 4905 1968; may be followed.

<sup>\*</sup>Specification for inland packaging of cotton cloth and yarn (first revision).
†Code for seaworthy packaging of cotton yarn and cloth (third revision).
†Methods for random sampling.

### IS: 755 - 1984

### 8.5 Number of Tests and Criteria for Conformity

Ends, picks, mass, length and width, indetermin- able characteristics and visual inspection	According to col 2 of Table 3	Number of non-conforming pieces shall not exceed the corresponding number given in col 3 of Table 3
Dimensional change, colour fastness to wash- ing, perspiration, bleaching and scouring loss	According to col 4 of Table 3	All the test specimens shall meet the requirements
Colour fastness to light	2 for lot sizes of 300 or less and 3 for lot sizes of 301 and above	do

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SHRI T. O. THOMAS

Members Representing SHRI B. B. GUPTA Government of Uttar Pradesh SHRI G. D. BANERJEE ( Alternate ) SHRI B. R. KOWSHIK Textiles Committee, Bombay DR M. N. U. KURUP Ministry of Defence (DGI) SHRI N. K. NAGPAL ( Alternate ) SHRI C. V. PRABHAKARAN The Khadi & Village Industries Commission, Bombay SHRI M. V. RAMACHANDRA ( Alternate ) SHRI S. RANGARAJAN The Handicrafts and Handlooms Exports Corporation of India Ltd, Madras SHRI R. LAKSHMANAN (Alternate) SENIOR EXECUTIVE & SPECIAL The Tamil Nadu Handloom Weavers' Co-opera-OFFICER tive Society Ltd, Madras SENIOR MANAGER ( DESIGN & PRODUCT DEVELOPMENT ) ( Alternate )

Kerala State Handloom Weavers' Co-operative

Society Ltd, Trivandrum

#### **BUREAU OF INDIAN STANDARDS**

Headquarters:

Manak Bhavan, 9 Bahadur Shah Zafar Marg, NEW DELHI 110002

Telephones: 323 0131, 323 3375, 323 9402

Fax: 91 11 3234062, 91 11 3239399, 91 11 3239382

rax: 91 [1 3234002, 91 11 3239399, 91 11 3239302	
(Čo	ims : Manaksanstha mmon to all Offices)
Central Laboratory:	Telephone
Plot No. 20/9, Site IV, Sahibabad Industrial Area, Sahibabad 201010	8-77 00 32
Regional Offices:	
Central : Manak Bhavan, 9 Bahadur Shah Zafar Marg, NEW DELHI 1100	
*Eastern: 1/14 CIT Scheme VII M, V.I.P. Road, Maniktola, CALCUTTA 700	0054 337 86 62
Northern: SCO 335-336, Sector 34-A, CHANDIGARH 160022	60 38 43
Southern : C.I.T. Campus, IV Cross Road, CHENNAI 600113	235 23 15
†Western : Manakalaya, E9, Behind Marol Telephone Exchange, Andheri MUMBAI 400093	(East), 832 92 95
Branch Offices::	
'Pushpak', Nurmohamed Shaikh Marg, Khanpur, AHMEDABAD 380001	550 13 48
‡Peenya Industrial Area, 1st Stage, Bangalore-Tumkur Road, BANGALORE 560058	839 49 55
Gangotri Complex, 5th Floor, Bhadbhada Road, T.T. Nagar, BHOPAL 46	52003 55 40 21
Plot No. 62-63, Unit VI, Ganga Nagar, BHUBANESHWAR 751001	40 36 27
Kalaikathir Buildings, 670 Avinashi Road, COIMBATORE 641037	21 01 41
Plot No. 43, Sector 16 A, Mathura Road, FARIDABAD 121001	8-28 88 01
Savitri Complex, 116 G.T. Road, GHAZIABAD 201001	8-71 19 96
53/5 Ward No.29, R.G. Barua Road, 5th By-lane, GUWAHATI 781003	54 11 37
5-8-56C, L.N. Gupta Marg, Nampally Station Road, HYDERABAD 50000	20 10 83
E-52, Chitaranjan Marg, C-Scheme, JAIPUR 302001	37 29 25
117/418 B, Sarvodaya Nagar, KANPUR 208005	21 68 76
Seth Bhawan, 2nd Floor, Behind Leela Cinema, Naval Kishore LUCKNOW 226001	Road, 23 89 23
NIT BUilding, Second Floor, Gokulpat Market, NAGPUR 440010	52 51 71
Patliputra Industrial Estate, PATNA 800013	26 23 05
Institution of Engineers (India) Building 1332 Shivaji Nagar, PUNE 41100	5 32 36 35
T.C. No. 14/1421, University P. O. Palayam, THIRUVANANTHAPURAM 695	034 6 21 17
*Sales Office is at 5 Chowringhee Approach, P.O. Princep Street, CALCUTTA 700072	27 10 85
†Sales Office is at Novelty Chambers, Grant Road, MUMBAI 400007	309 65 28
‡Sales Office is at 'F' Block, Unity Building, Narashimaraja Square, BANGALORE 560002	222 39 71